From: Peter Tam
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Date: 5/20/03 10:38AM
Subject: Oyster Creek Implementation of EAL per NUMARC/NESP-007 (TAC MB7989)

John:

We are reviewing your 3/10/03 submittal on this subject. Our reviewer, Tom Blount, has a number of questions (below) that we would like to discuss with you in a conference call. We plan to finalize the questions into a formal request for additional information after the conference call.

This e-mail aims solely to prepare you for the conference call. It does not formally request for additional information, nor does it convey a formal NRC staff position.

1. The Summary of Differences identifies NUMARC/NESP-007 Rev.3 as a source of information or guidance for several EALs (see MU6, MA6, MS5). The reviewer is not familiar with this specific document. The NRC staff is cognizant of the following with regard to EAL guidance:

A. NUREG-0654/FEMA-REP-1 Rev.1 (NRC endorsed guidance)
B. NUMARC/NESP-007 Rev. 2 (NRC endorsed guidance)
C. NEI 97-03 Rev. 3 (Not reviewed or endorsed by NRC, retracted by NEI)
D. NEI 99-01 Rev.4 (Under review & endorsement process by NRC)

Are the references in the submittal to NUMARC/NESP-007 Rev.3 intended to be one of the four the staff is aware of or is this another document that we should have available for review?

2. Proposed Initiating Condition RU7 EAL threshold value is in part "Radiation readings >10 times normal at any of the following ISFSI locations:...." For the proposed condition:

A. What is the basis for "normal?"
B. How often is "normal" determined?
C. How is this value affected by changes in background levels?
D. NEI 99-01, Rev.4, dated August 2000, used a value of >2 times the ISFSI Technical Specification limits as the threshold value. In NUMARC/NESP-007, Rev.2 basis statement for AU2 indicates the use of 2 R/hr at the face of the storage module, or 1 R/hr at one foot from a damaged module. What is the basis for the selection of "10 times normal?"
E. What is the basis for changing the current EAL Threshold value?

3. Regarding Fuel Clad Barrier from Table F-1, the Loss condition and the Potential Loss conditions both contain the attribute "level cannot be determined." When the condition exists that RPV level cannot be determined, which condition for the fuel clad barrier is provided? Is it a "loss of the barrier" or is it a "potential loss" of the barrier? For the following condition, what would be the classification?

"Primary Containment Loss, RCS leak rate >50 gpm and RPV level cannot be determined."

Regarding the RCS Barrier, if RPV level cannot be determined, the RCS barrier is considered "Loss." Since this is the same criteria applied to the Fuel Clad barrier, in this condition, "RPV Level cannot be determined", is it intended that this be a loss of two barriers from this one indicator?

4. For the Primary Containment Barrier in Table F-1, item 3d.,"Breached / Bypassed", Loss event 2, intentional venting per EMG-3200.02 is required with drywell pressure >3.0 psig, indicates this threshold does not apply to venting of Primary Containment as needed to maintain pressure below the high drywell pressure setpoint. Is it intended that this exception apply during declared emergency conditions when/if venting containment at pressures below 3 psig? Does this statement indicate it is appropriate to have a pathway to the environment from the containment during emergency conditions without considering Primary Containment barrier lost when containment pressure is < 3 psig?

5. Regarding MS4, "Auto and manual SCRAM NOT successful", the EAL threshold includes the ARI (alternate rod insertion) function to also fail before meeting the criteria for this classification. Does the ARI have the same scram requirements as RPS for rod insertion? Specifically, does the ARI have to meet the same requirements to shutdown the reactor as RPS in order to be considered functional? Why is it appropriate to include ARI in the same capacity as the RPS scram function when a reactor overpower condition could have already occurred due to the failure of the automatic and manual scram functions?

6. Regarding MA4, EAL threshold value for EAL 2, the EAL indicates "failure of all manual scram attempts...." Is this intended to mean failure of the all methods to initiate a scram or failure of the manual scram (mode switch or pushbuttons) initiating devices to perform after some number of initiations? The basis indicates all means have failed versus all attempts. Please clarify.

If this is intended to be all means of manually scramming the plant, why isn't the condition stated as "any one of the means failing" to be consistent with any other RPS setpoint failure, since the basis (Differences section) indicates this is anticipatory of the failure of the automatic scram signal?

7. Regarding MA6 and MU6 (combine 7 and 8?), the EAL threshold value includes a parenthetical Note 1. The reviewer could not find the corresponding note, please clarify or identify location of the note. The Shift Supervisors (SS) opinion was removed from the EAL because it does not provide any useful assessment criteria per the "Summary of differences" document. Why is the SS opinion not removed from the basis section for the same reason?

8. With regard to MU8, is the Bureau of Nuclear Engineering Information Line, ED Hotline, NJ State ED Hotline or the environmental Assessment Direct Line manned such that at any time of day or night it is reasonable to expect the phone will be answered in a relatively expeditious manner (i.e., about 15 minutes)? Can each of these lines support exigent offsite notifications?

9. With regard to HG1, EAL threshold value item 2, is it required to have loss of the remote and alternate shutdown panels, or can this be met with a loss of the remote or an alternate shutdown panel in order to impact the capability?

10. With regard to HS1, EAL #2, are there other Security related issues such as hostage taking or extortion, that if directed at a plant Vital Area, could rise to the level of an Site Area Emergency? If so, how are they addressed?

11. With regard to HU1, EAL #2, what is the basis for the use of <2 hours or imminent? If one supposes a time is not provided as to time of the occurrence, will the event be declared?

12. Regarding HA3, there is no EAL to address site-specific indications in the control room. How is NUMARC/NESP-007, EAL HA1-4 addressed for things such as wind speed or judgement?

13. Regarding HA4, the EAL states that to meet the threshold of this EAL Safe Shutdown System operability is required. The basis further states that the primary concern for this EAL is the magnitude of the fire or explosion and the effects on the safe shutdown systems required for the present operational condition. The focus appears to be on whether the equipment will operate for the current plant mode. Does this EAL require the system to be operating or required to be operating before the declaration is made? Can the system be in a non-operating standby mode and the fire occur requiring classification?

14. Regarding HU4, EAL 1 includes verification of the fire alarm. However, the basis statement indicates that verification is by operator actions to confirm alarms received in the Control Room. Are the actions to verify alarms limited to those actions that can be accomplished only in the Control Room as indicated in NUMARC/NESP-007?

15. Regarding HA5, the basis indicates that areas that require only temporary access and can be supported by the use of respiratory protection should not be considered as meeting this threshold. Would this include such activities as routine log-keeping, conducting surveillances or other normal plant evolutions? Describe what is included in the phrase "affect safe operation of the plant."

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Auto Delete:	No
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Notify Recipients:	Yes
Priority:	Standard
Reply Requested:	No
Return Notification:	None
Concealed Subject:	No
Security:	Standard
To Be Delivered:	Immediate
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